

REMARKS

Reconsideration of this application is respectfully requested. Claims 1-2 were pending in the application and under consideration. Claims 3-29 have been withdrawn from consideration in an Election of November 21, 2005, but may be added to the application if found dependent on an allowable base claim. By the foregoing amendment, claims 1 and 2 have been amended. Claims 84-97 have been added. Claims 1-2 and 84-97 remain pending and under consideration.

Rejection Under 35 U.S.C. § 103(a)

Claims 1 and 2 have been rejected as being unpatentable Under 35 U.S.C. § 103(a). Claim 1 has been rejected over Applicant's Admitted Prior Art "APA" in view of U.S. Patent No. 4,679,321 to Plonski (hereinafter "Plonski.").

Polinski is directed to coaxial circuit boards having *non-metalized holes*. The circuit board is constructed having one side provide with a ground plane and the other side with terminal pads and interconnection points (Polinski, col. 2, lines 13-19).

Claim 1 recites, in part,

a first conductive element disposed within the first through-hole and extending from the first surface to the second surface to form a first conductive via;

Assuming *arguendo* that the substrate 108 of Plonski is equivalent to the substrate of claim 1, and that the hole 108 of Plonski is equivalent to the through-hole of claim 1, Plonski specifically teaches a *non-metalized hole* (Plonski, col. 2, lines 14 and 68). Accordingly, Plonski does not disclose or suggest a first conductive element disposed within the first through-hole and extending from the first surface to the second surface to form a first conductive via, as recited in claim 1. In view of this clear distinction, applicant respectfully

submits that neither claim 1, nor claims 84-93 which depend from independent claim 1, are rendered obvious by Plonski in view of APA.

Claim 2 has been rejected under 35 U.S.C. § 103 over Applicant's Admitted Prior Art "APA" in view of Plonski and in view of Tengler. Because claim 2 depends from, and further limits claim 1, it necessarily includes every element of independent claim 1, including:

a first conductive element disposed within the first through-hole and extending from the first surface to the second surface to form a first conductive via;

As discussed above, Plonski does not disclose or suggest this element, and applicant respectfully submits that Tengler does not disclose or suggest this element either. Assuming, *arguendo*, that the housing block 4 (Tengler, Figs. 1 & 4, and page 6, 2nd line from bottom) is equivalent to the substrate of claim 1, that the passage 13 (Tengler, page 10, line 7 and Fig. 4 bottom) and/or openings 7, 7G, 7S (Tengler, Figs 2, 3, 5) are equivalent to the through-holes of claim 1, as suggested by the examiner, and further assuming, *arguendo*, that the "signal contact 20 formed by a pair of bowed arms 37 that are attached to flat connection portion by relatively straight supports 38" (Tengler, page 9, first full paragraph, lines 1-2) is equivalent to the first conductive via of claim 1, Tengler teaches a protective tubular sheath 22 that provides a function of *electrically insulating* the signal contact 20 from the interior wall 60 of the housing 3 opening 7S (Tengler, page 10, first full paragraph, lines 1-3). Figure 4 shows the "leading ends 39" of the arched portion of signal contact 20 (Tengler, page 9, first full paragraph, 3rd line from bottom, and Fig. 4, the lower end of the arched contacts) terminating against the "protective sheath 22 that is in the form of a hollow tubular member 50 with one or more tail portion" inside of the hole. (Tengler, page 9, last paragraph, first two lines). Accordingly, even if the "signal contact formed by a pair of bowed arms" were regarded as equivalent to conductive element of the above claim element, Tengler does not disclose or suggest the element of "a first conductive element disposed within the first through-hole and *extending from the first surface to the second surface* to form a first conductive via." Because neither Plonski, Tengler, nor applicant's admitted prior art disclose or suggest this limitation, even if these references could be combined in a manner suggested

by the examiner, their combination still would lack the above recited element, and therefore, would not establish a prima facie case for obviousness. For at least these reasons, applicant respectfully submits that claim 2 is allowable over Plonski, Tengler, the AAPA, and their combination.

New Claims

Newly added claims 84-98 are all drawn to Group 1, Specie 1, which was directed to Fig. 2A according to the groupings set forth in the Restriction of October 19, 2005. No new matter has been added. The newly added independent claim 94, and dependent claims 95-98 are also not obvious in view of the cited references for at least the reasons discussed above in conjunction with claims 1 and 2.

Conclusion

Applicant submits that all pending claims are in condition for allowance. If a telephone interview would be helpful in any way, the examiner is invited to call the undersigned attorney.

A petition for a two (2) month extension of time is enclosed herewith.

Authorization is hereby given to charge deposit account 50-1914 for any fee deficiency associated with this Response.

Respectfully submitted
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